

IN THE CLAIMS

Claims 1-20 (Canceled).

21 (Currently Amended). A method comprising:

applying an ~~first and second~~ electric field ~~gradients~~ to a solution containing charged particles under conditions that will cause negatively and positively charged particles to ~~simultaneously~~ focus along the length of a first channel formed in a device, the negatively charged particles to focus in the first channel in one direction, the positively charged particles to focus in the first channel in the opposite direction; and

~~without transfer,~~ applying another electric field to cause at least some of the focused, negatively charged particles to migrate through a sieve disposed in one second channel in said device and at least some of the focused, positively charged particles to migrate through the sieve disposed in another second channel in said device, said one second channel and said another second channel situated proximate an area where at least some of said negatively and positively charged particles have focused respectively, both of said second channels transverse to said first channel and in communication therewith.

22 (Previously Presented). The method of claim 21 including causing the negatively charged particles to separate and focus along the length of the first channel such that groups of negatively charged particles are focused at or near each one second channel in a plurality of said one second channels.

23 (Previously Presented). The method of claim 22 including establishing a convective force in said solution, said convective force to oppose the first and the second electric field gradients.

Claims 24-25 (Canceled).

26 (Previously Presented). The method of claim 21 further including causing said focused positively charged particles to become negatively charged.

27 (Previously Presented). The method of claim 21 wherein applying first and second electric field gradients includes applying two linear electric field gradients.

28 (Previously Presented). The method of claim 26 further including detecting charged particles in both of said second channels.

29 (Previously Presented). The method of claim 28 wherein detecting charged particles in both of said second channels includes detecting a change in conductivity in a region of said second channels.

30 (Currently Amended). The method of claim 21 wherein applying the ~~first and second electric field gradients to the solution containing charged particles~~ includes applying first and second electric field gradients to a solution containing proteins or portions thereof.

Claims 31-39 (Canceled).